

***Thismia goodii* (Burmanniaceae), the Blue-capped Thismia, a New Species from Borneo**

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Abstract

A new species in Sect. *Sarcosiphon* of *Thismia*, *T. goodii* Kiew, with remarkable blue perianth lobes, is described from Sabah, Borneo.

Introduction

Thismias are poorly known because, being ephemeral, they are rarely encountered and, being succulent, they make poor herbarium specimens.

This new species was encountered on a sandstone outcrop where two small populations were found growing among the leaf litter (Kiew, 1999). Its most striking feature is the bright blue cap comprised of the perianth lobes that top the flower (Fig. 1). In its mitriform perianth lobes without tentacles or appendages and in its coralline root system, it clearly belongs to Sect. *Sarcosiphon*, which until now included three other Malesian species: *T. clandestina* (Blume) Miq., *T. crocea* (Becc.) J.J. Smith and *T. episcopalis* (Becc.) F. v. Muell. (Jonker, 1948).

It differs from all three species in its coloration and the presence of the distinct three-lobed outer perianth (Fig. 2). In addition, it differs from *T. crocea* in its linear (as opposed to spatulate) inner perianth lobes, which border the large holes in the mitriform apex, and from the other two species in the absence of flanges or hairs on the anthers. The other Bornean species, *T. episcopalis*, would not be confused with this new species being a much larger plant (5–19 cm tall) with more flowers per stem (1–8 flowers), which are yellow. While the Javanese *T. clandestina* is a smaller plant (up to 4–5 cm tall) with 1–2 flowers per stem, it is different in its greyish-green, smaller flowers 10 (rarely 13) mm long.

Description of *Thismia goodii* Kiew, sp. nov.

Inter species sectionis Sarcosiphonis ponenda sed ab eis colore perianthii loborum lazulino et lobis exterioribus perianthii conspicuis recedens.



Figure 1. a. *Thismia goodii* growing on leaf litter, b. the flower.
Photos: Ali Ibrahim.

Typus: *Ruth Kiew RK 4611*, Borneo, Sabah, Sipitang, Ulu Maligan, 19 March 1999 (holotypus SAN, isotypi L, SING).

Small succulent achlorophyllous herb with pale brown coralline root system. Stems glabrous, pale fawn, 0.75–7 cm long and in life 2–3 mm thick, erect, unbranched. Leaves spirally arranged, distant, 1.5–2 x c. 1 mm long, narrowly lanceolate, appressed to and concolorous with stem. Bracts 3, at base of flower forming an involucre covering the ovary, narrowly lanceolate, 7–9 x 3–4 mm, apex acuminate, pale brown, sparsely hairy especially on margin. Flowers usually solitary, rarely 2 and then flowering in succession, (15–) 18–24 mm long, erect, with slight unpleasant smell of fish oil. Perianth tube urceolate, 12–15 mm long, c. 3–4 mm wide at base dilating to (6–)8(–9) mm at top with slight constriction below anthers, white with faint dark green tinge with narrow dark blackish green longitudinal stripes alternating with faint ones, internally with low longitudinal ribs with faint cross bars, caducous. Perianth lobes electric blue in colour. Outer perianth lobes 3, $\pm$ erect, slightly recurved, 2–3 x 5–9 mm, with minute point at centre. Inner

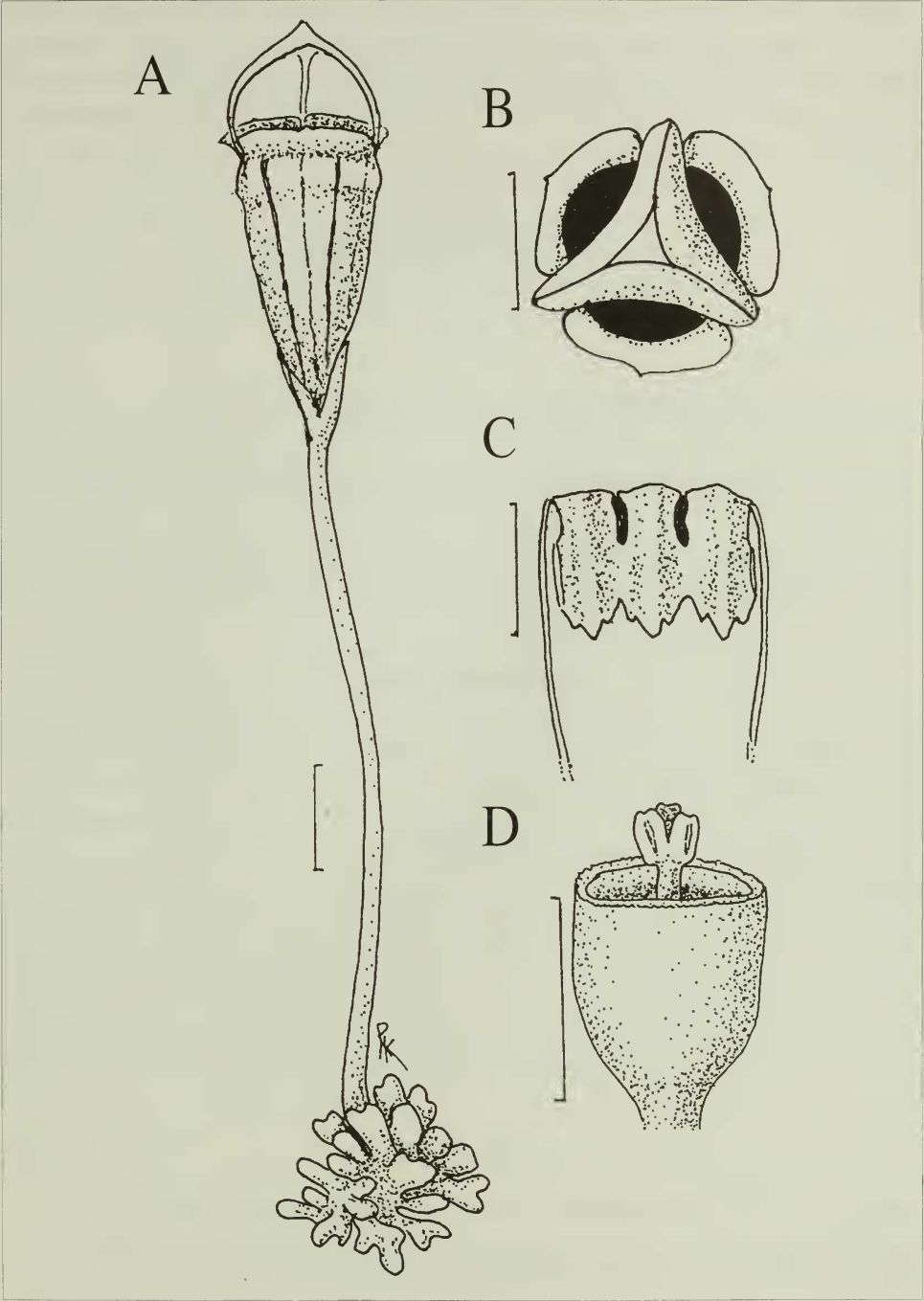


Figure 2. *Thismia goodii* Kiew.
A. whole plant; B. flower viewed from the top showing outer and inner perianths; C. 3 stamens;
D. fruits with persistent stigma and style.
(Scale bar: 5 mm)

perianth lobes 3, narrow at base arching upwards to join forming a mitre (5–)7(–9) mm high and making 3 large holes, thicker at apex and acuminate, apex without appendages. Stamens 6, hanging from the inside of thickened rim of perianth tube, filaments ribbon-shaped, free, 2–2.5 mm long, anthers joined laterally, c. 3 mm long each with a central adaxial ridge, apex 3-toothed, without flanges or hairs. Ovary obovoid, c. 3.5 x 3 mm, deep purple, 1-celled with 3 placentas; style cylindric, c. 1.5 x 0.5 mm; stigmas 3-fid, c. 1.5 mm long, minutely papillose. Fruit fleshy, urceolate, 3.5–5 x 3–4 mm, dark brown, persistent base of perianth tube forming a rim c. 0.5 mm high, stigma and style persistent. Seeds numerous, oblong in outline, c. 0.15 mm long.

Distribution: Known only from the type locality.

Habitat: On thick leaf litter on a sandstone outcrop at 1260 m altitude.

Notes: This species is named for Mr Good Antok, who first discovered it during an expedition to the Sipitang District in eastern Sabah.

Acknowledgements

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